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APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,481 10/24/2001		10/24/2001	Chiyoshi Sasaki	100809-00050(SCET 5216 19.098)	
26304	7590	10/24/2002			
		N ZAVIS ROSI	EXAMINER		
575 MADISO NEW YORK				TOLIN, GERALD P	
				ART UNIT	PAPER NUMBER
				2835	
				DATE MAILED: 10/24/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

•		Application No		Applicant(s)				
<b>a</b>		10/037,481		SASAKI ET AL.				
	Office Action Summary	Examiner		Art Unit				
		Gerald P Tolin		2835				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status								
1)	Responsive to communication(s) filed on							
2a)□	This action is <b>FINAL</b> . 2b)⊠ Thi	s action is non-f	inal.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4)区	Claim(s) /-23 is/are pending in the application.							
ح√□	4a) Of the above claim(s) is/are withdrawn from consideration.							
6)⊠	5)							
,								
	Claim(s) 12,13,15 is/are objected to.	alaction require	en ont					
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers								
9) The specification is objected to by the Examiner.								
	The drawing(s) filed on is/are: a) accept		ed to by the Exan	niner.				
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12) The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)[	☑ All b)☐ Some * c)☐ None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
* S	<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5/7</u>			(PTO-413) Paper No(s) atent Application (PTO-152)				

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- 1. The two IDS statements are noted--- the art is made of record.
- 2. Priority to 10-25-00 is acknowledged.
- 3. Page 8 refers to opening 525. Such is not seen in the drawings. Please explain and add to the drawings.
- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 1-9 and 17-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 6, "substrate" should be plural for accuracy.

In claim 1 line 9, "at least one of" should be deleted and "spaces" in line 10 made singular for definite language since a space was presented.

The claim 2 plane recitations are broad enough to read on almost any orientation.

Also, the claim 8 subject matter already appears in claim 3. Should claim 8 be cancelled?

The claim 17-23 "electronic equipment" is confusing as to makeup and fails to clearly cooperate with other claim elements. It is not clear what is encompassed by "electronic equipment". Please amend and discuss this point.

Further, such recitation is so broad as to read on any electrical device.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1,2,9,10,11 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Ootori.

Finned sink 54/52, shield 56, boards 13-14-31 with components are clearly seen in the cover figure. Protruding portions and fins can read on the fins of 54. All else is clearly shown.

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ootori.

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The presence of a heat pipe(not shown in the current reference) to cool cpu's in computer environments is notoriously old and well known to promote better cooling. Such therefore would have been obvious to employ.

10. Claims 1,2,9-11 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakajima.

Figure 2 shows first board 22, second board 24, components on the boards 23b/25, shield 26 sink 28 and protrusions; all other claimed elements are clearly seen.

11. Claims 1,2,9-11 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Frank, Jr.

Figure 2 shows boards 150 and 131 with components. Intermediate plate 140 is the shield and sink. 141/143 can be the fins. All else is clearly shown.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald P Tolin whose telephone number is 703-308-3114. The examiner can normally be reached on M-F first friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 703-308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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Gerald P Tolin Primary Examiner Art Unit 2835

gpt October 21, 2002

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